



THE COMMONWEALTH OF MASSACHUSETTS

**DEPARTMENT OF  
TELECOMMUNICATIONS & ENERGY**

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January 30, 2006

Edward J. Dienst  
Senior Vice-President, Distribution Operations  
National Grid  
55 Bearfoot Road  
Northborough, MA 01532

**Re: Electric Distribution System Safety Plans**

Dear Mr. Dienst:

On December 9, 2005, the Department of Telecommunications and Energy ("Department") distributed the following two reports relating to the safety of electric distribution systems in Massachusetts: (1) the Independent Assessment of Stray Voltage in Underground Distribution Systems of Massachusetts Electric Companies ("Stray Voltage Final Report") as prepared by Navigant Consulting, Inc., and (2) the Independent Assessment of Dislodged Manhole Covers ("Manhole Safety Final Report") as prepared by Siemens Power Transmission & Distribution, Inc. ("Siemens"). With the issuance of these reports, the Department required each of the Massachusetts electric distribution companies, including Massachusetts Electric Company and Nantucket Electric Company d/b/a/ National Grid, to file plans to implement the recommendations contained in each report. National Grid filed its implementation plan with the Department on January 10, 2006 ("National Grid Plan").

The Department has reviewed the National Grid Plan to implement procedures pertaining to the detection and mitigation of stray voltage and to the inspection and operation of manholes, and we find that the National Grid Plan is in substantial compliance with the recommendations contained in the Stray Voltage Final Report and the Manhole Safety Final Report. Accordingly, the Department approves the National Grid Plan with the following modifications. Regarding National Grid's plan to report stray voltage incidents and manhole

events through the Department's Outage Reporting Protocol ("ORP") system, until such time as the ORP system is modified to accept the reporting data recommended in the Final Reports, National Grid must report stray voltage incidents and manhole events to the Department, including all required information, outside of the ORP system.

The Manhole Safety Final Report included a recommendation that each company maintain a database of new and repair splices made by employees and contractor crews in order to determine possible workmanship issues and related splicing training needs. Siemens provided a listing of information that should be captured in the splicing log at Appendix B.2. Beginning no later than June 1, 2006, National Grid is directed to keep a splicing log on all new and repair splices containing the information recommended by the Manhole Safety Final Report. The companies may develop, through the Working Group (see below), an alternative proposal that allows the identification of workmanship-related trends. The Department will review any alternative proposed by the Working Group, and may modify this requirement as appropriate.

Consistent with the recommendations in the Stray Voltage Final Report and the Manhole Safety Final Report, the Department directs National Grid to participate with the other Massachusetts electric distribution companies in a working group ("Working Group") to address issues regarding electric distribution system safety, the development of a uniform approach to electric distribution system safety plans, and such other issues of importance including, but not limited to: the development of protective equipment for use on secondary systems, manhole event trends, root cause analyses, research studies, results of pilot programs, new technologies, and lessons learned. In addition, the Working Group shall address the use of the Outage Reporting Protocol or other standardized protocol for reporting manhole events and stray voltage incidents to the Department. The Working Group shall meet quarterly, and report quarterly to the Department. Staff from the Department's Electric Power Division may participate in the Working Group.

National Grid shall implement its Plan immediately. In order to allow for the Department's continued review of the National Grid Plan, by June 1, 2006, and every three months thereafter, National Grid shall file with the Department's Electric Power Division a written report on its progress in implementing the National Grid Plan, including a summary of all stray voltage incidents and manhole events in the current quarter and year to date. Upon review of National Grid's implementation of its Plan, the Department may direct modifications to the National Grid Plan as necessary.

Edward J. Dienst  
National Grid  
Electric Distribution System Safety Plans  
January 30, 2006

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By Order of the Department,

\_\_\_\_\_/s/\_\_\_\_\_  
Judith F. Judson, Chairman

\_\_\_\_\_/s/\_\_\_\_\_  
James Connelly, Commissioner

\_\_\_\_\_/s/\_\_\_\_\_  
W. Robert Keating, Commissioner

\_\_\_\_\_/s/\_\_\_\_\_  
Paul G. Afonso, Commissioner

\_\_\_\_\_/s/\_\_\_\_\_  
Brian Paul Golden, Commissioner

cc: Mary L. Cottrell, Secretary  
Andrew O. Kaplan, General Counsel  
Timothy Shevlin, Executive Director  
Ronald LeComte, Director, Electric Power Division  
John Cope-Flanagan, Assistant General Counsel  
Joan Foster Evans, Senior Counsel